

On-Farm Irrigation

PUBLICATION

Irrigation Pumping Plants

Water Management Handbook Series
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About this publication:

Irrigation Pumping Plants is the fourth in a series of water management handbooks developed by the University of California Irrigation Program. Funding for this project was provided by the California Energy Commission and the U.S. Department of Agriculture Water Quality Initiative.

Other titles in this publication series include: Agricultural Salinity and Drainage; Surge Irrigation; Low-Volume Irrigation; Micro-Irrigation of Trees and Vines; Drip Irrigation for Row Crops. Ordering Information appears on the bottom of this page.

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Introduction:

Managing energy efficiently - obtaining maximum output for every energy dollar spent - is a principal objective in operating an irrigation pumping plant. The more efficient the pumping plant, the more revenue dollars returned per dollar spent on pumping. But for a pumping plant to operate at maximum efficiency, the plant operator must be thoroughly knowledgeable about how pumping plants work.

This manual has been developed to answer the questions that most frequently plague growers about irrigation pumping plant operation. Organized as a series of short chapters on selected topics and prepared in a semi-technical format, the manual is grounded in the author's own field experience and in evaluations of numerous actual pumping plants. At the heart of the book (pages 77-84) is a trouble-shooting guide, which sets out suggested remedies for the most common problems arising in pumping plant operation. Pages 9 - 102 present case studies - evaluations of real-world pumping plant problems along with recommended corrective action.

Questions or comments:

Questions and comments about the manual should be directed to the author, Blaine Hanson, Department of Land, Air and Water Resources, University of California, Davis, CA 95616, (530) 752-1130.

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